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09/750,096	12/29/2000	Thomas P. Chmara	57983.000033	3961

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EXAMINER	
TON, ANTHONY T	

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/750,096	CHMARA ET AL.	
	Examiner	Art Unit	
	Anthony T Ton	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-12,15-18 and 21-24* is/are rejected.

7)☒ Claim(s) *5, 6,13,14,19 and 20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 February 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

PHIRIN SAM
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTIONS

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 1, 2, 4, 7-10, 12, 15-18** and **21-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Shinbashi et al.* (US Patent No. **5,796,717**) herein after referred to as *Shinbashi,* in view of *Albert et al.* (US Patent No. **6,606,315**) herein after referred to as *Albert.*

a) **Regarding to Claim 9**: *Shinbashi* disclosed an apparatus for preventing information losses due to network node failure, the apparatus comprising:

a primary node *(see Fig.4A: block 1-1, working unit)*;

at least one backup node operatively connected to the primary node *(see Fig.4A: blocks 3-1 and 3-2, stand-by unit)*;

means for receiving ingress traffic in the primary node from a first endpoint *(see Fig.6: blocks Mux/Demux (means for receiving ingress traffic), and block SW on the top-left of the figure (a first endpoint))*;

means for replicating the ingress traffic to the at least one backup node *(see Fig.4A: connection from Input line of the primary node to the input of block 4a)*;

means for outputting primary egress traffic from the primary node *(Fig.6: blocks Mux/Demux and Output line);*

means for outputting backup egress traffic from the at least one backup node *(see Fig.6: blocks Mux/Demux of the Stand-By Unit block)*;

determining means operatively connected to the primary node and the at least one backup node for determining whether the primary node has failed *(see Fig.6: blocks Control unit (on the common Stand-by Unit) and Sub-CPU (on one-by-one of the working units nodes and stand-by units); and see col.5 lines 19-35: failure detection signals)*;

means for transmitting the primary egress traffic from the primary node to a second endpoint if the determining means determine that the primary node has not failed *(see Fig.6: blocks SW and blocks Mux/Demux of the working unit)*; and

means for transmitting the backup egress traffic from a selected one of the at least one backup nodes to the second endpoint if the determining means determine that the primary node has failed *(see Fig.6: blocks SW and blocks Mux/Demux of the stand-by unit)*.

Shinbashi failed to explicitly disclosed synchronizing means operatively connected to the primary node and the backup node for synchronizing the at least one backup node and the primary node.

Albert explicitly disclosed such synchronizing means operatively connected to the primary node and the backup node for synchronizing the at least one backup node and the primary node *(see Fig.2A: Service Managers 241 and 242; and col.1 line 66-col.2 line 2)*.

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such synchronizing means operatively connected to the primary node and the backup node for synchronizing the at least one backup node and the primary node, as taught by *Albert* with *Shinbashi*, so that data can be immediately transferred throughout the stand-by unit without

processing if a failure occurs at the primary unit. The motivation for doing so would have been to provide synchronization and control to eliminate the scalability limitations of the past in a data packet network *(see Albert: col.9 lines 37-40).* Therefore, it would have been obvious to combine *Albert* with *Shinbashi* in the invention as specified in the claim.

b) **Regarding to Claim 10**: *Shinbashi* disclosed all aspects of this claim as set forth in claim 9.

Shinbashi failed to explicitly disclose the primary node and the at least one backup node are network routers.

Albert explicitly disclosed such primary node and at least one backup node are network routers *(see col.9 lines 22-23*).

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such primary node and at least one backup node are network routers, as taught by *Albert* with *Shinbashi*, so that data can be operated in network protocol. The motivation for doing so would have been to allow a router to process packets in accordance with decisions made by the service manager *(see Albert: col.9 lines 57-59).* Therefore, it would have been obvious to combine *Albert* with *Shinbashi* in the invention as specified in the claim.

c) **Regarding to Claim 12**: *Shinbashi* disclosed all aspects of this claim as set forth in claim 9.

Shinbashi failed to explicitly disclosed means for transmitting synchronization information from the primary node to the at least one backup node.

Albert clearly disclosed such means for transmitting synchronization information from the primary node to the at least one backup node *(see col.14 line 63-67).*

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such means for transmitting synchronization information from the primary node to the at least one backup node, as taught by *Albert* with *Shinbashi*, so that data can be immediately transferred throughout the stand-by unit without processing if a failure occurs at the primary unit. The motivation for doing so would have been to provide enhancing reliability and more efficiency in a data packet network. Therefore, it would have been obvious to combine *Albert* with *Shinbashi* in the invention as specified in the claim.

d) **Regarding to Claim 15**: *Shinbashi* disclosed all aspects of this claim as set forth in claim 9.

Shinbashi failed to explicitly disclose the apparatus further comprising means for periodically assessing synchronization maintenance between the primary node and the at least one backup node.

Albert disclosed such means for periodically assessing synchronization maintenance between the primary node and the at least one backup node *(see col.4 lines 10-24)*.

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such means for periodically assessing synchronization maintenance between the primary node and the at least one backup node, as taught by *Albert* with *Shinbashi*, in order to allow an establishment with a large number of network elements without overloading at the CPU of a primary node and a backup node in a data communication network. The motivation for doing so would have been to provide synchronization to forwarding agents without requiring a two-phase command protocol *(see Albert: col.28 lines 49-50)*. Therefore, it would have been obvious to combine *Albert* with *Shinbashi* in the invention as specified in the claim.

e) **Regarding to Claim 16**: *Shinbashi* disclosed all aspects of this claim as set forth in claims 9 and 15.

Shinbashi failed to explicitly disclosed the means for periodically assessing synchronization maintenance further comprise means for transmitting at least a portion of an internal state of the primary node to the backup node sufficient to permit replication of primary node traffic on the at least one backup node.

Albert disclosed such means for transmitting at least a portion of an internal state of the primary node to the backup node sufficient to permit replication of primary node traffic on the at least one backup node *(see col.10 lines 1-12)*.

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such means for transmitting at least a portion of an internal state of the primary node to the backup node sufficient to permit replication of primary node traffic on the at least one backup node, as taught by *Albert* with *Shinbashi*, so that a back-up node can handle a problem of network traffic. The motivation for doing so would have been to provide the back-up agent continue to handle common flows *(see Albert: col.14 lines 63-67)*. Therefore, it would have been obvious to combine *Albert* with *Shinbashi* in the invention as specified in the claim.

f) **Regarding to Claim 24**: *Shinbashi* disclosed all aspects of this claim as set forth in claim 9.

Shinbashi failed to explicitly disclose the means for replicating the ingress traffic to the at least one backup node comprises means for simultaneously passing a copy of the ingress traffic to the at least one backup node.

Albert explicitly disclosed such means for simultaneously passing a copy of the ingress traffic to the at least one backup node (*see col.26 lines 20-34).*

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such means for simultaneously passing a copy of the ingress traffic to the at least one backup node, as taught by *Albert* with *Shinbashi*, so that communications packets can be properly routed throughout a backup network router. The motivation for doing so would have been to prevent data loses if the working node has failed. Therefore, it would have been obvious to combine *Albert* with *Shinbashi* in the invention as specified in the claim.

g) **Regarding to Claims 1, 2, 4, 7, 8** and **23**: These claims are rejected for the same reasons as claims 9, 10, 12, 15, 16 and 24, respectively because the apparatus in claims 9, 10, 12, 15, 16 and 24 can be used to practice the method steps of claims 1, 2, 4, 7, 8 and 23.

h) **Regarding to Claims 17, 18** and **21:** the claimed subject matters of these claims are similar to that of claims 1, 4 and 7, respectively. Therefore, the rejection to the claims 1, 4 and 7 would apply to reject the article of manufacture of these claims as well.

i) **Regarding to Claim 22**: *Shinbashi* disclosed all aspects of this claim as set forth in claim 1.

Shinbashi failed to explicitly disclose a computer data signal embodied in a carrier wave readable by a computing system and encoding a computer program of instructions for executing a computer process for preventing information losses due to network failure.

Albert explicitly disclosed such a computer data signal embodied in a carrier wave readable by a computing system and encoding a computer program of instructions for executing

a computer process for preventing information losses due to network failure (*see col.11 lines 16-22 and Claim 14).*

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such a computer data signal embodied in a carrier wave readable by a computing system and encoding a computer program of instructions for executing a computer process for preventing information losses due to network failure, as taught by *Albert* with *Shinbashi*, so that communications packets can be properly routed throughout a network. The motivation for doing so would have been make *Shinbashi* more efficient. Therefore, it would have been obvious to combine *Albert* with *Shinbashi* in the invention as specified in the claim.

3. **Claims 3** and **11** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Shinbashi et al* (US Patent No. **5,796,717**) in view of *Albert et al.* (US Patent No. **6,606,315**) as applied to claims 9 and 1 above, and further in view of *Adams, Jr. et al* (US Patent No. **5,444,782**) hereinafter referred to as *Adams*.

a) **Regarding to Claim 11**: *Shinbashi* disclosed all aspects of this claim as set forth in claim 9.

Shinbashi failed to explicitly disclose the primary node and the at least one backup node are security engines for receiving encrypted ingress traffic and outputting decrypted egress traffic.

Adams explicitly disclosed such encrypted/decrypted ingress/egress engines *(see col.3 lines 46-59: hardware for encrypting and decrypting data).*

At the time of the invention, it would be obvious to a person of ordinary skill in the art to combine such security engines for receiving encrypted ingress traffic and outputting decrypted egress traffic, as taught by *Adams* with *Shinbashi*, in order to secure communication between computer systems connected to an open network. The motivation for doing so would have been to secure information for clients if required. Therefore, it would have been obvious to combine *Adams* with *Shinbashi* in the invention as specified in the claim.

b) **Regarding to Claim 3**: This claim is rejected for the same reasons as claim 11 because the apparatus in claim 11 can be used to practice the method steps of claim 3.

Allowable Subject Matter

4. **Claims 5, 6, 13, 14, 19** and **20** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Remarks

5. Applicant's arguments filed on July 6, 2004 with respect to **claims 1-24** have been considered but are moot in view of the new grounds of rejection.

Examiner Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Anthony T Ton** whose telephone number is **571-272-3076**. The examiner can normally be reached on M-F: 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ken Vanderpuye** can be reached on **571-272-3078**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

by :

Anthony T. Ton
Patent Examiner
December 16, 2004

PHIRIN SAM
PRIMARY EXAMINER